

CLAIMS

1. A dental instrument for the extraction of an object from a root canal, comprising a shaft (1) having an open-end part (3) designed to receive at least a part of object (9), this open-end part (3) able to be deformed to permit seizing object (9) by clamping and then extracting it from the root canal, characterized in that the open-end part (3) is tubular and is able to plastically deform, so that it leads to a reduction of its inner section, under the effect of a given stress.
2. The dental instrument according to claim 1, further characterized in that the given stress is a twist.
3. The dental instrument according to claim 2, further characterized in that the wall of open-end part (3) has at least one deformation opening (6) in a specific zone, constituting a weakened zone (5), designed to undergo plastic deformation.
4. The dental instrument according to claim 3, further characterized in that the deformation opening or openings (6) is (are) traversing.
5. The dental instrument according to claim 3 or 4, further characterized in that the wall of open-end part (3) in the given zone has deformation openings (6) inclined 45° relative to axis (7) of shaft (1).
6. The dental instrument according to claim 5, further characterized in that the wall of open-end part (3) in the given zone has three series of three deformation openings (6) uniformly distributed along the periphery of open-end part (3), inclined 45° relative to axis (7) of shaft (1).

7. The dental instrument according to claim 3 or 4, further characterized in that the wall of the open-end part in the given zone has deformation openings (6a-6e) parallel to the axis of the shaft
8. The dental instrument according to claim 3 or 4, further characterized in that the wall of the open-end part in the given zone has deformation holes (6f-6h) arranged in a staggered manner.
9. The dental instrument according to claim 2, further characterized in that the wall of the open-end part comprises a zone (5a, 5b) of reduced thickness relative to the rest of the shaft, this zone (5a, 5b) constituting a weakened zone designed to undergo plastic deformation.
10. The dental instrument according to claim 2, further characterized in that the open-end part comprises a zone (5c) made of a material that is less hard than the material of which the rest of the shaft is made, this zone (5c) constituting a weakened zone designed to undergo plastic deformation.
11. The dental instrument according to claim 2, further characterized in that the open-end part comprises a thermally pretreated zone to render it less strong than the rest of the shaft, this zone constituting a weakened zone designed to undergo plastic deformation.
12. The dental instrument according to any one of claims 2 to 11, further characterized in that it comprises means (8) to block open-end part (3) from rotating in the dentin, at least in the direction of the twist, during the application of the twist.

13. The dental instrument according to claim 12, further characterized in that said blocking means comprise teeth (8) situated on the frontal face (4) of said open-end part (3).

14. The dental instrument according to claim 12, further characterized in that said blocking means comprise a portion of the inner surface of the open-end part, this portion of the inner surface having a conical shape (51d) flared toward the opening of the open-end part so as to be able to become wedged around one end of the object.

15. The dental instrument according to claim 1, further characterized in that the given stress is an axial pressure.

16. The dental instrument according to claim 15, further characterized in that the open-end part comprises a zone (5e) with a zigzag-shaped wall.

17. The dental instrument according to any one of claims 1 to 16, further characterized in that it has teeth (8) situated on frontal face (4) of open-end part (3), around the opening of open-end part (3), that can be used to dig into the dentin.

18. The dental instrument according to any one of claims 1 to 17, further characterized in that it also has a handle (2).